



LEVELnews

Great Lakes — St. Lawrence River Water Levels

Lake Superior's October level highest since 1985

Above average water supplies were received in all the Great Lakes in October maintaining all lake levels well above average for this time of year. Lake Superior levels were nearing record high levels by the end of October due to the wet conditions in its basin over the month. Heavy rains in the Ottawa River watershed at the end of October caused a rapid increase in the river's outflow causing levels in the St. Lawrence River to increase to record levels for this time of year, however the levels remained below the flood levels

seen this past spring.

October monthly lake levels

All of the lakes had monthly mean levels above average in October. The October monthly mean water level of Lake Superior was 30 cm above its period-of-record (1918–2016) average and 13 cm higher than October 2016, making it the 4th highest October mean level on record and the highest seen since 1985. Lake Michigan–Huron's mean level in October was 44 cm above average, 18 cm higher than last

October's level and the highest since 1997. Lake Erie's mean monthly level was 41 cm above average, 15 cm above its level the previous October and the highest it has been since 1997. Lake Ontario's mean monthly October level was 25 cm above average, 32 cm higher than the level last year and the highest it has been at this time of year since 1986.

Lake level changes

The wet conditions were offset to some degree by high outflow from each of the lakes resulting in variable lake level changes

Great Lakes Water Level Information

Lake	October 2017 Monthly Mean Level		Beginning-of-November 2017 Level	
	Compared to Monthly Average (1918–2016)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2016)	Compared to One Year Ago
Superior	30 cm above	13 cm above	33 cm above	20 cm above
Michigan–Huron	44 cm above	18 cm above	49 cm above	24 cm above
St. Clair	47 cm above	14 cm above	43 cm above	10 cm above
Erie	41 cm above	15 cm above	38 cm above	10 cm above
Ontario	25 cm above	32 cm above	26 cm above	31 cm above

when compared with average conditions. Lake Superior rose 1 cm through October when its average (1918–2016) decline is 3 cm. Lake Michigan–Huron remained stable when on average it declines 7 cm. Lake Erie fell 14 cm over October which was more than the average fall of 10 cm. Lake Ontario levels fell 12 cm over October which equals its average decline over the month.

Beginning-of-November lake levels

All the lakes had beginning-of-November levels well above average. Lake Superior's beginning-of-

November level was 33 cm above average (1918–2016), 20 cm above the level at this time last year. Lake Superior's beginning-of-November level was the second highest on record with the 1985 record high level only 5 cm higher. Lake Michigan–Huron's beginning-of-November level was 49 cm above average, 24 cm higher than last year and the highest it has been since 1997. Lake Erie was 38 cm above average at the beginning of November, 10 cm above this time last year and the highest it has been since 1997. Lake Ontario's level at the start of November was 26 cm above average, 31 cm above this time last year and the highest it has been since 1986. At the beginning of November, all of the lakes were at least 62 cm above their chart datum level.

Water levels forecast

Relative to their beginning-of-November levels and assuming average water supply conditions all the Great Lake levels are expected to decline through

December. For a graphical representation of recent and forecasted water levels on the Great Lakes, refer to the Canadian Hydrographic Service's monthly water levels bulletin at: <http://tides-marees.gc.ca/C&A/bulletin-eng.html>.

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October Precipitation over the Great Lakes*

Great Lakes Basin	145%	Lake Erie	108%
Lake Superior	120% (including Lake St. Clair)		
Lake Michigan–Huron	161%	Lake Ontario	171%

October Outflows from the Great Lakes*

Lake Superior	138%	Lake Erie	115%
Lake Michigan–Huron	111%	Lake Ontario	124%

*As a percentage of the long-term October average.
NOTE: These figures are preliminary.